

Exponential Review
Test Tuesday

Exponential Review

p444 q 1-6

p445 q 8-13

p446 q 1-7

Test

Wed

+ Graphing Exponential
Functions- Handouts

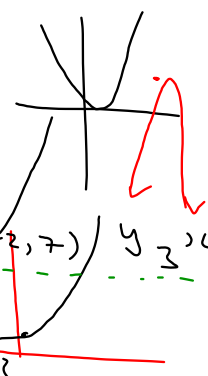
May 22-7:54 AM

Hand out Review

$$y = a(x-h)^2 + k$$

$$y = -3(x-2)^2 + 3$$

$$y = 3^{x+2} + 6$$

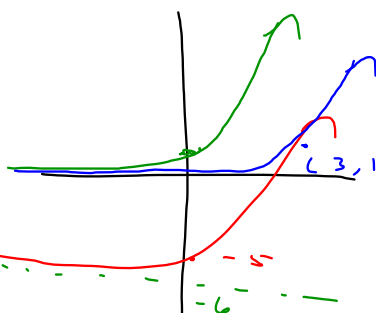


May 22-7:59 AM

$$y = 2^x$$

$$y = 2^x - 6$$

$$y = 2^{x-3}$$

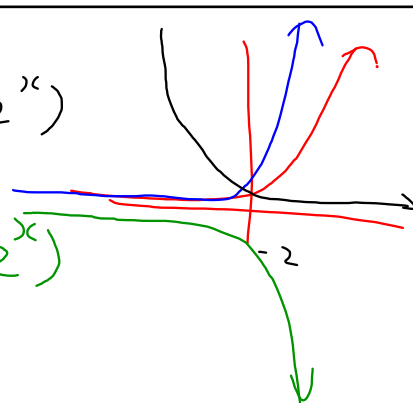


May 22-1:53 PM

$$y = 3(2^x)$$

$$y = -2(2^x)$$

$$y = \frac{1}{4}x$$



May 22-1:56 PM

Unit Review Handout

#5 $P(n) = P_0(1+r)^n$

$P(n)?$

$$P(1) = 250$$

$r = \text{doubles}/30 \text{ min} \quad ? \quad 1.00? \quad 1.0$

$n = 8$

$$\begin{aligned} P(n) &= 250(1+1)^8 \\ &= 250(2)^8 \\ &= 250(256) \\ &= 64000 \end{aligned}$$

May 22-2:04 PM

Applications of Exponential
Functions

q 8

$$P(n) = P_0(1+r)^n$$

$P(n)?$

$$\begin{aligned} P(0) &= 1000 = 1000(1+1.0)^{10} \\ r &= 1.0 \\ n &= 10 \\ &= 1000(2)^{10} \\ &= 1024000 \end{aligned}$$

May 22-2:09 PM

$$\begin{aligned}
 & 200^{4\frac{1}{3}} \\
 & = \sqrt[3]{200^4} \\
 & = \sqrt[3]{1.6000000000} \\
 & = 1169.6
 \end{aligned}$$

May 26-10:40 AM

$$\begin{aligned}
 3 a) P(n) &= 0.25g \\
 P(0) &= 1g \\
 r &= \frac{1}{2} = 0.50 \\
 n &= ? \\
 P(n) &= P(0)(1-r)^n \\
 0.25 &= 1(1-0.50)^n \\
 0.25 &= 1(0.50)^n \\
 0.25 &= 0.50^n \\
 \sqrt[1]{0.25} &= 0.50^n \\
 0.25 &= 0.50^n \\
 n &= 2 \\
 n &= 2 \times 140 \\
 &= 280d
 \end{aligned}$$

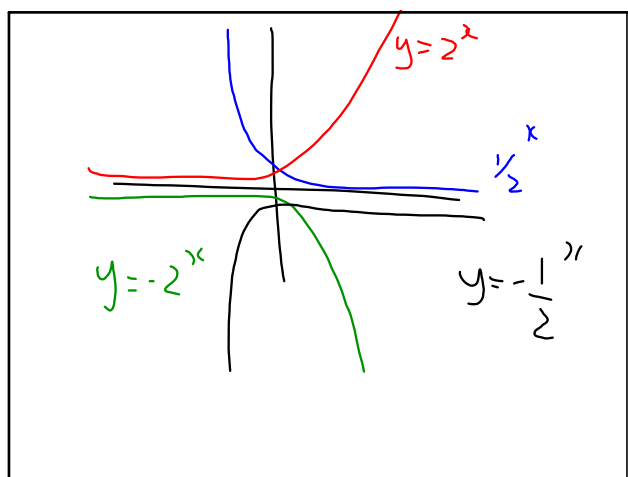
May 22-2:12 PM

$$\begin{aligned}
 9. \quad P(n) &= P_0(1+r)^n \\
 P_0 &= 1500 \\
 r &= \text{triples as a } \% \quad 200\% \\
 n &= \text{\# of times} \\
 2 \quad P(n) &= 1500(1+2.0)^n \\
 P(n) &= 1500(3)^n
 \end{aligned}$$

May 25-10:15 AM

$$\begin{aligned}
 & (10^1(10^3)^{-1})^{-2} \\
 & ((10^1)(10^{-3}))^{-2} \\
 & (10^{-2})^{-2} \\
 & (10)^{+4}
 \end{aligned}$$

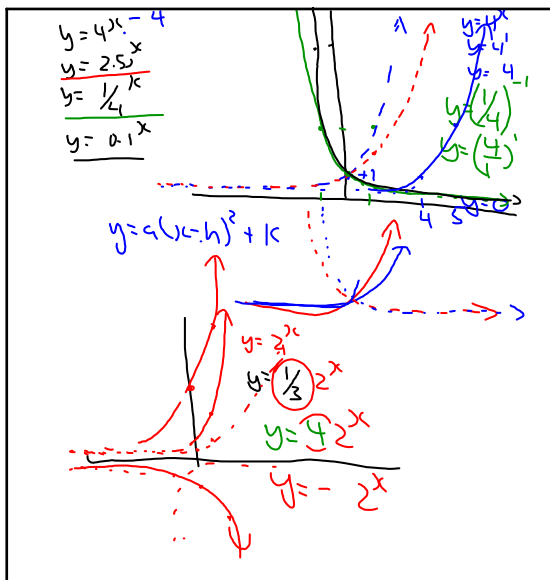
May 25-10:57 AM



May 26-10:51 AM

$$\begin{aligned}
 & 125^{\frac{1}{3}} \\
 & \sqrt[3]{125} = 5 \\
 & 0.25 \\
 & 81^{\frac{1}{4}} \\
 & \sqrt[4]{81} = 3
 \end{aligned}$$

May 26-11:42 AM



May 4-9:15 AM

$$3^{4+4+1} = 3^9$$

$$\left(\left(\frac{1}{9}\right)^5\right)^5 = \left(-1\right)^{\frac{4}{5}} - (1)^4$$

$$\left(\frac{1}{9}\right)^{10} + 1^{\frac{4}{5}} - 1$$

$$\frac{1}{9}^{12} = \frac{1}{9}^{12-12}$$

$$\frac{1}{9}^{12} = \frac{1}{9}^0$$

$$= 1$$

$$\sqrt[12]{125}^{\frac{1}{3}} = \sqrt[12]{125}^{\frac{3}{2}}$$

$$= 5 \left(\sqrt[12]{16}\right)^{\frac{3}{2}}$$

$$\left(\frac{4}{4 \times 4 \times 4}\right)^{\frac{3}{2}}$$

$$\frac{12}{10} = 1.2$$

$$\left(\sqrt[10]{121}\right)^{\frac{3}{2}}$$

Dec 12-11:03 AM

$$P(n) = P_0(1+r)^n$$

P_0 now $P(n) = ?$
 P_0 original $P(0) = 2500$
 r - growth rate = 0.05
 n = # of times it grows = 10

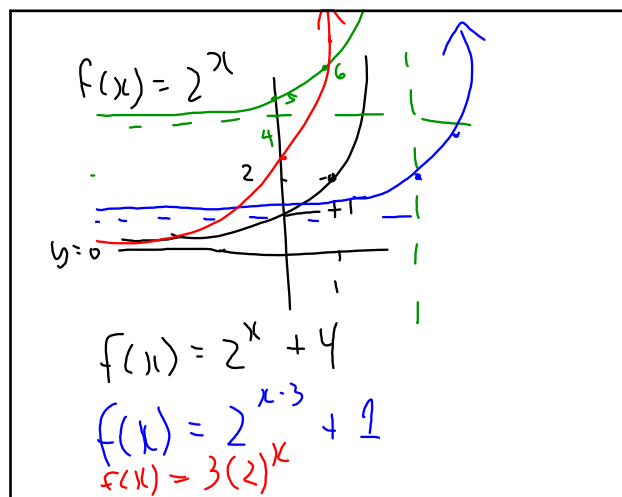
$$P(n) = 2500(1+0.05)^{10}$$

$$= 2500(1.05)^{10}$$

$$= 2500(1.63)$$

$$= 4072.23$$

Dec 12-11:12 AM



Dec 12-11:23 AM